WHAT IS CLAIMED IS:

- 1. An immaturable unialgal culture strain derived from a marine macroalga of red algae growing in a natural seawater area with intermixing of fresh water and having characteristics that no female gametophytes are detectable as matured bodies in nature and only tetrasporophytes are detectable as matured bodies.
- 2. The immaturable unialgal culture strain according to claim 1, wherein the marine macroalga of red algae is a red alga belonging to the genus of *Gracilaria* sp.
- 3. The immaturable unialgal culture strain according to claim 2, wherein the red alga belonging to the genus of *Gracilaria* sp. is *Gracilaria verrucosa*, *Gracilaria chorda*, or a subspecies thereof.
- 4. The immaturable unialgal culture strain according to claim 1, 2 or 3, wherein the amount of adhering algae is smaller than 10 cells per 400 mg of the wet mass amount after 3 years of continued culturing.
- 5. A method for producing an immaturable unialgal culture strain characterized by the steps of collecting matured sporophytes of a marine macroalga of red algae growing in a natural seawater area with intermixing of fresh water and having characteristics that no female gametophytes are detectable as matured bodies in nature and only tetrasporophytes are detectable as matured bodies, standing the sporophytes as cut open to cause release of the spores and culturing the released spores to continue growing and culturing after sprouting of upright bodies from germinated spores.
- 6. The method for producing an immaturable unialgal culture strain according to claim 5, wherein the marine macroalga of red algae is a red algabelonging to the genus of *Gracilaria* sp.
- 7. The method for producing an immaturable unialgal culture strain according to claim 5, wherein the red alga belonging to the genus of *Gracilaria* sp. is *Gracilaria verrucosa*, *Gracilaria chorda*, or a subspecies thereof.

- 8. The method for producing an immaturable unialgal culture strain according to claim 5, 6 or 7, wherein the natural seawater area with intermixing of fresh water is a seawater area where the salt content does not exceed 1.0% by mass.
- 9. The method for producing an immaturable unialgal culture strain according to any of claims 5 to 8, wherein the immaturable unialgal culture strain has adhering algae of smaller than 10 cells in number per 400 mg of wet mass amount after 3 years of continued culturing.
- 10. An alga body obtained by growing the immaturable unialgal culture strain according to any of claims 1 to 4.